PRELIMINARY AND SHORT REPORTS

AUREOMYCIN THERAPY OF DISSEMINATED CUTANEOUS HERPES SIMPLEX (KAPOSI'S VARICELLIFORM ERUPTION)*

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For several years now, disseminated cutaneous herpes simplex (1), formerly called Kaposi's varicelliform eruption, has been known to be caused by the herpes simplex virus as shown by Wenner (2) in 1944 and subsequently confirmed by other investigators. Previously Wise and Sulzberger (3) had suggested the herpes simplex virus as the cause of this type of eruption.

Availability of aureomycin, an agent found effective against certain viruses, suggested its use for therapy and prophylaxis of disseminated cutaneous herpes simplex. Braley and Sanders (4) found this antibiotic to be effective in dendritic keratitis i.e. in herpes simplex of the cornea. Their patients received hourly ocular instillations of an 0.5 per cent solution of a borate salt having a pH of 7.5 to 7.8 when dissolved in isotonic sodium chloride solution. The results of its use on herpes simplex infections of the cornea were striking. Some of the patients received aureomycin parenterally in addition to the ocular instillations. Fisher and Schwartz (5) found aureomycin to be effective in stomatitis ulceromembranosa acuta.

The following are abstracts of two cases in which the combined systemic and topical use of aureomycin appeared to have a striking effect.

CASE REPORTS

Case 1. C. J., a 24 year old, white, married woman had suffered from a severe atopic dermatitis since infancy. She had a history of a disseminated cutaneous herpes simplex in November 1940. When she came under our care in November 1948, she presented a severe generalized eruption with a clinical picture characteristic of disseminated cutaneous herpes simplex. This eruption had been preceded by small groups of blisters on the chin. She now presented umbilicated vesicles and pustules, exudation, enlarged and tender lymph nodes, edema, erythema, crusting and swelling, confined mainly to the face, neck, nipples, upper chest and upper extremities, i.e. to those areas which were previously involved by the atopic dermatitis. The temperature was 101.2°F. The blood count showed 8300 W.B.C. i.e. a relative leucopenia.

The cutaneous eruption had almost completely subsided about 13 days after its inception and after a stormy and febrile course. On the eighth hospital day, several corneal ulcers were discovered and a diagnosis of bilateral herpetic (dendritic) keratitis was made by Dr. I. Givner. At this time the vesicles and pustules on the skin areas had disappeared. After a 24 hour trial with local application of ether, potassium iodide and homatropine, without response, the patient was given hourly ocular instillations of a ½% solution of aureomycin. In only 2 days the condition of the eyes was much improved.

Except for minor fluctuations of the atopic dermatitis, the patient's convalescence was uneventful for a period of two months. At the end of this period she rather suddenly developed three groups of herpetic lesions on the sides of the chin. Several of the submandibular lymph nodes again became swollen and tender. To avoid a recurrence of the dissemination of the herpes simplex virus, aureomycin (250 mgs. orally 4 times daily) was prescribed combined with 2% aureomycin in Qualatum (Almay), which was applied

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Received for publication February 10, 1949.

locally to the lesions and the surrounding areas of normal skin 3 to 4 times daily. Within 24 hours the lesions had commenced to dry up, and healing continued through the following days. There had been no extension of the herpes simplex infection to other areas.

Case 2. J. N., a 38 year old, white male, had suffered from atopic dermatitis for many years, in combination with asthma and hayfever. Three days prior to his visit to our office, this patient developed some small "blisters" on the upper lip and, in the evening, noticed extension to the mouth and neck. Intramuscular injections of penicillin and local applications of bacitracin ointment, administered before his visit to our office, had failed to control the spread of the eruption. On examination, this patient presented on the bearded area of the neck, an extensive grouped eruption of typical herpetic vesicles on an erythematous base, extending from one ear to the other. The right ear, the lower part of the face and the perioral and glabellar areas were involved by a similar characteristic herpetic eruption. On the right side of the upper lip, the residue of the original "fever blisters" was noted as a small indefinite patch of erythema and crusting. On the left side of the palate there was a group of pinhead-sized eroded lesions. A diagnosis of disseminated cutaneous and mucosal herpes simplex was made. Within 24 hours of aureomycin therapy orally, (500 mgs. 4 times daily) and the local application of aureomycin 2% in (Qualatum) (Almay), applied 3 times daily, there was dramatic improvement. The lesions commenced to dry up quickly and there was no sign of any further dissemination. The attack was accompanied by regional lymph node enlargement but not by fever. Aureomycin was continued by mouth and by local application for 1 week in order to forestall recurrence of the eruption.

Comment: Disseminated cutaneous herpes simplex (Kaposi's varicelliform eruption) is potentially a severe (and in exceptional instances fatal) disease for which no specific treatment has existed. Sulfonamides (6); pooled serum or plasma (7); penicillin and immune globulin (8) have all failed to influence greatly the course of the disease. Results of treatment with penicillin and moccasin venom in 1 case and with moccasin venom and benadryl hydrochloride in the second case (9) were equivocal.

The above cited cases strongly suggest that the combined topical and systemic use of aureomycin is effective in preventing the dissemination of localized herpes simplex (Cases 1 and 2) and in curing disseminated cutaneous herpes simplex (Case 2).

Much further laboratory and clinical work is necessary to establish the validity of the efficacy of aureomycin in the treatment and prevention of disseminated cutaneous herpes simplex. However, in view of the severity and potential danger of this not altogether uncommon disease, it appeared to us worthwhile to acquaint the medical profession with the possible valuable effects of this new antibiotic.

SUMMARY

Experience in 2 cases of herpes simplex virus infection suggests, although it does not prove, that combined systemic and local aureomycin therapy may be effective in preventing cutaneous dissemination of herpes simplex virus, in patients with a tendency to such spread e.g. patients with atopic dermatitis. It also suggests that, where the cutaneous dissemination has already occurred (disseminated cutaneous herpes simplex; formerly called Kaposi's varicelliform eruption) aureomycin is a specific agent preventing further spread and quickly healing lesions which are already present. The present study does not permit conclusions as to whether the topical or systemic administration was the more effective, or whether the combination was necessary or whether either alone would have sufficed to bring about the improvements noted.

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